

KOROLEV, H.P.

Stubble crops in Stavropol Territory. Zemledelie 7 no.6:
40-43 Je '59. (MIRA 12:8:

1. Glavnyy agronom Stavropol'skogo krayevogo upravleniya sel'-skogo khozyaystva.
(Stavropol Territory--Field crops)

MAZO, A.A.; AKHTYRSKAYA, L.G.; Prinimal uchastiye KOROLEV, M.V.

Study of the nutrition of diesel locomotive operators. Vop.
pit. 20 no.6:31-33 N-D '61. (MIRA 15:6)

1. Iz laboratorii (zav. - dotsent L.G. Menin) sanitarno-
epidemiologicheskoy stantsii Yugo-Vostochnoy zheleznoy dorogi,
Voronezh.

(NUTRITION)
(LOCOMOTIVE ENGINEERS)

KOROLEV, M.Ye.

Material on the hydrogeology of the upper Uderoy Basin; eastern part of the Yenisey Ridge. Uch. zap. Kaz. un. 117 no.9:278-281 '57.
(MIRA 13:1)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-Lenina.
Kafedra obshchey geologii.
(Uderoy Valley--Water, Underground)

KEROLEV, N.

MOVING PICTURES IN AGRICULTURE

Agricultural films on collective farms. Kinomekhanik. No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1958₂, Unclassified.

KOROLEV, N.

Improve the training of specialists. Avt.transp. 39 no.9:1-3
S '61. (MIRA 14:10)

1. Zaveduyushchiy sektorom Byuro Tsentral'nogo komiteta Kommunisti-
cheskoy partii Sovetskogo Soyuza po RSFSR.
(Highway transport workers)

ABELEVICH, A.A.; ARTEM'YEV, Yu.N.; VLASOV, A.P.; GAL'PERIN, A.S.; YEVSNIKOV,
A.V.; IVANOV, G.P.; KOROLEV, N.A.; LEVITSKIY, I.S.; LIVSHITS, L.G.;
MELKOV, M.P.; NAZAROV, N.I.; NOVIKOV, M.P.; POPOV, V.Ya.; TEPILOV,
A.G.; BAKHAREV, A.P., inzh., retsenzent; SAVEL'YEV, Ye.Ya., red. izd-
va; MODEL', B.I., tekhn. red.; EL'KIND, V.D., tekhn. red.

[Technological aspects of the repair of crawler vehicles] Tekhnolo-
giya remonta gusenichnykh mashin. Moskva, Gos. nauchno-tekhn. izd-
vo mashinostroit. lit-ry 1960. 466 p. (MIRA 14:7)
(Crawler vehicles--Maintenance and repair)

KOROLEV, N. A.

Swine - feeding and Feeding Stuffs

Must beets be cooked for swine feed. Sov.zootekh. 7 No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952, 2 Unclassified.

1. KOROLEV, N. A.
2. USSR (600)
4. Swine--Feeding and Feeding Stuffs
7. Feeding sprouted legume seed to young livestock, Sots. zhiv., 15, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

LIVSHITS, L.G., kand.tekhn.nauk; KOROLEV, N.A., inzh.

Cold welding of cast iron agricultural machinery parts. Svar.
proizv. no.10:38-40 0 '61. (MIRA 14:9)

1. Gosudarstvennyy soyuznyy nauchno-issledovatel'skiy tekhnologicheskiy institut.

(Agricultural machinery--Maintenance and repair)
(Cold welding)

ARTEM'YEV, Yu.N., kand. tekhn. nauk; ASTVATSATUROV, G.G., inzh.;
 BARABANOV, V.Ye., inzh.; BARYKOV, G.A., inzh.; BISHOVATYY, S.I.,
 inzh.; GALAYEVA, L.M., inzh.; GAL'PERIN, A.S., kand. tekhn. nauk;
 GAL'CHENKO, I.I., inzh.; GONCHAR, I.S., kand. tekhn. nauk;
 DEGTYAREV, I.L., kand. tekhn. nauk; DYADYUSHKO, V.P., inzh.;
 YERMAKOV, I.N., inzh.; ZHOTKEVICH, T.S., inzh.; ZUSMANOVICH, G.G.,
 inzh.; KAZAKOV, V.K., inzh.; KOZLOV, A.M., inzh.; KOROLEV, N.A.,
 inzh.; KRIVENKO, P.M., kand. tekhn. nauk; LAPITSKIY, M.A., inzh.;
 LEBEDEV, K.S., inzh.; LIBERMAN, A.R., inzh.; LIVSHITS, L.G., kand.
 tekhn. nauk; LOSEV, V.N., inzh.; LUKANOV, M.A., inzh.; LYUBCHENKO,
 A.M., inzh.; MAMEDOV, A.M., kand. tekhn. nauk; MATVEYEV, V.A.,
 inzh.; ORANSKIY, N.N., inzh.; POLYACHENKO, A.V., kand. tekhn. nauk;
 POFOV, V.P., kand. tekhn. nauk; PUSTOVALOV, I.I., inzh.;
 PYTCHENKO, P.I., inzh.; PYATETSKIY, B.G., inzh.; RABOCHIY, L.G.,
 kand. tekhn. nauk; ROL'BIN, Ye.M., inzh.; SELIVANOV, A.I., doktor
 tekhn. nauk; SEMENOV, V.M., inzh.; SKOROKHOD, I.I., inzh.; SLABODCHIKOV,
 V.I., inzh.; STORCHAK, I.M., inzh.; STRADYMOV, F.Ya., kand. tekhn.
 nauk; SUKHINA, N.V., inzh.; TIMOFEYEV, N.D., inzh.; FEDOSOV, I.M.,
 kand. tekhn. nauk; FILATOV, A.G., inzh.; KHODOV, L.P., inzh.;
 KHROMETSKIY, P.A., inzh.; TSVETKOV, V.S., inzh.; TSEYTLIN, B.Ye.,
 inzh.; SHARAGIN, A.M., inzh.; CHISTYAKOV, V.D., inzh.; BUD'KO, V.A.,
 red.; PESTRYAKOV, A.I., red.; GUREVICH, M.M., tekhn. red.

(Continued on next card)

ARTEM'YEV, Yu.N.— (continued) Card 2.

[Manual on the repair of machinery and tractors] Spravochnik po
remontu mashinno-traktornogo parka. Pod red. A.I.Selivanova.
Moskva, Sel'khozizdat. Vols.1-2. 1962. (MIRA 15:6)
(Agricultural machinery—Maintenance and repair)
(Tractors—Maintenance and repair)

KOROLEV, N.A., aspirant

New method for measuring vertical displacements in the contact area of conjugate bodies. Izv.vys.ucheb.zav.; mashinostr. no.6:133-136 '62.
(MIRA 15:11)

1. Institut mashinovedeniya AN SSSR.
(Deformations (Mechanics)—Measurements)

112-3-6251D
Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957,
Nr 3, p. 170 (USSR)

AUTHOR: Korolev, N. A.

TITLE: Investigation of Two Methods of Stabilizing Automatic
Control Relay Systems (Issledovaniye dvukh sposobov
stabilizatsii releynykh sistem avtomaticheskogo
regulirovaniya)

ABSTRACT: Bibliographic entry on the author's dissertation for the
degree of Candidate of Technical Sciences, presented to
the Automation and Remote Control Institute (In-t avtomat.
i telemekhan.), AN SSSR, Moscow, 1956.

ASSOCIATION: Automation and Remote Control Institute, Academy of
Sciences of the USSR (In-t avtomat. i telemekhan.,
AN SSSR)

Card 1/1

KOROLEV, N. A.

"On Periodic Processes in Relay Systems With Internal Feedback,"
by N. A. Korolev, Avtomatika i Telemekhanika, No 11, Nov 56, pp
969-978 ✓

The periodic processes, (self-oscillations and forced oscillations),
in relay systems with internal feedback were considered in the above paper
dated 11 February 1956. It was found that the process peculiarity was
due to the derivative surge of the relay input signal.

It was further concluded that the approximate harmonic balance method,
(describing function), may lead to false conclusions while defining param-
eters of periodic processes.

SUM. 1287

KOROLEV, N A .
 [AUTHOR N.A. KOROLEV (Moscow) FA - 3226
 TITLE Pulse Correction of Control Relay Systems.
 (Impul'snaya stabilizatsiya releynykh sistem avtomaticheskogo
 regulirovaniya.- Russian)
 PERIODICAL Avtomatika i Telemekhanika 1957, Vol 18, Nr 5, pp 397-408
 (USSR)
 ABSTRACT Received: 6/1957 Reviewed: 7/1957
 The paper under review describes the impulse method for
 purposes of increasing frequencies of self-oscillation in
 relay systems of automatic control, as well as the methods
 for the computation of some stabilizing schemes. The step-
 wise variations of the impulse y are investigated. A des-
 cription is given of two variants of an impulse stabilisation
 with the aid of additional circuits that correct the shape
 of the control impulses. Transitional processes are not dealt
 with by the paper under review. The paper investigates, first
 of all, the stabilisation with impulses of arbitrary duration,
 and then the stabilisation at which the beginning of the ad-
 ditional impulse is not arbitrary but rather determined by
 the maximum value of the control signal. The end of the ad-
 ditional impulse coincides with the end of the basic impulse.
 The impulse stabilisation consists in the changing the shape

CARD 1/2

TSYPKIN, Yakov Zalmanovich; KOROLEV, N.A., red.; PYSHKIN, I.V., red.;
GAVRILOV, S.S., tekhn.red.

[Theory of pulse systems] Teoriia impul'snykh sistem. Moskva,
Gos.izd-vo fiziko-matem.lit-ry, 1958. 724 p. (MIRA 12:4)
(Pulse techniques (Electronics))

FEL'DBAUM, Aleksandr Aronovich. Prinimal uchastiye SCHREYDER, Yu.A.,
kand.fiz.-matem.nauk. KOROL'EV, N.A., red.; AKHLAMOV, S.N.,
tekhn.red.

[Calculating devices in automatic control systems] Vychislitel'-
nye ustroistva v avtomaticheskikh sistemakh. Moskva, Gos.isd-vo
fiziko-matem.lit-ry, 1959. 800 p. (MIRA 13:2)
(Electronic calculating machines)
(Automatic control)

POLONNIKOV, Dmitriy Yevstigneyevich; EROLIS, K.E., retsenzent;
KOROLEV, N.A., red.; AKHILAMOV, S.N., tekhn.red.

[Electronic amplifiers of automatic compensators] Elektronnye
usiliteli avtomaticheskikh kompensatorov. Moskva, Gos.izd-vo
fiziko-matem.lit-ry, 1960. 334 p. (MIRA 13:3)
(Amplifiers (Electronics))

87989

9.6100

S/144/60/000/011/004/008
E031/E255

AUTHOR: Koroley, N. A., Candidate of Technical Sciences
TITLE: A Comparison of the Approximate and Exact Methods
of Determining the Parameters of Auto-Oscillation
in Control Relays

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy,
Elektromekhanika, 1960, No. 11, pp. 82-84

TEXT: The equation for auto-oscillations can be written
in the form $I(A)W(j\omega) + 1 = [g(A) + jb(A)]W(j\omega) + 1 = 0$ (1)
 $W(j\omega)$ is the frequency characteristic of the linear part of the
system, and $I(A)$ is the equivalent complex amplification coefficient
with real and imaginary parts $g(A)$ and $b(A)$ respectively.
Graphically the frequency ω and the amplitude A are determined by
the intersection of the curves $W(j\omega)$ and $1/I(A)$. Analytically
the determination of ω and A leads to the solution of two simultaneous
equations. The exact values of the frequency and the
length of the pulse corresponding to the half-period of the auto-
oscillation (τ) can be determined by frequency analysis. A
periodic sequence of rectangular pulses at the output of the relay
Card 1/2

87989

S/144/60/000/011/004/008
E031/E255

A Comparison of the Approximate and Exact Methods of Determining
the Parameters of Auto-Oscillation in Control Relays

is represented as a trigonometrical series, and the reaction of the linear part of the system is obtained as the sum of the reactions to each harmonic of the series. Approximate values of ω and γ can be obtained by retaining only the first harmonic of the series representing the rectangular pulses. Comparison with the result of solving the simultaneous equations shows that the two methods coincide. Thus the method introduced initially can be considered as a first approximation to the frequency method in the general case when the relay element has a symmetrical characteristic. There are 2 figures and 2 Soviet references.

ASSOCIATION: Institut avtomatiki i telemekhaniki AN SSSR
(Institute of Automatics and Telemechanics AS USSR)

SUBMITTED: September 19, 1960

Card 2/2

KOROLEV, N.A. (Moskva)

Compensation of the time delay in a relay system [with summary in
English]. Avtom. i telem. 22 no.5:605-612 My '61. (MIRA 14:6)
(Delay networks) (Automatic control)

KRASOVSKIY, Aleksandr Arkad'yevich; POSPELOV, Gennogen Sergeyevich;
KOROLEV, N.A., red.; BUL'DYAYEV, N.A., tekhn. red.

[Principles of automatic control and engineering cybernetics]
Osnovy avtomatiki i tekhnicheskoi kibernetiki. Moskva, Gosenergo-
izdat, 1962. 599 p. (MIRA 16:1)
(Cybernetics) (Automatic control)

DOGANOVSKIY, Stanislav Anatol'yevich; KULEBAKIN, V.S., akademik
retsenzent; KOROLEV, N.A., kand. tekhn. nauk, red.

[Computer units in automatic control systems responsive
to perturbation] Vychislitel'nye ustroistva v avtomati-
cheskikh sistemakh upravleniia po vozmushcheniiu. Moskva,
Energiia, 1964. 311 p. (MIRA 17:12)

MOROSANOV, Igor' Sergeyevich; KOROLEV, N.A., red.

[Relay-type optimizing control systems; approximate
methods of study] Releinye ekstremal'nye sistemy; pribli-
zhennyye metody issledovaniia. Moskva, Izd-vo "Nauka" 1964.
267 p. (MIRA 18:1)

KOROLEV, Nikolay Alekseyevich; SAZIKOV, M.I., red.

[Reconditioning of the cylinder head of the GAZ-51 motor-trucks and other aluminum parts of motor-vehicle engines]
Vosstanovlenie golovki tsilindrov avtomobilia GAZ-51 i
drugikh aliuminievykh detalei avtotraktornykh dvigatelei.
Moskva, Biuro tekhn. informatsii, 1963. 21 p.
(MIRA 17:9)

KOROLEV, N.A. (Omsk)

Changes in the surface layer of steel parts subjected to loaded
burnishing. Mashinovedenie no.3:66-75 '65.

(MIRA 18:6)

L 57809-65 EEC-4/EEC(k)-2/EST(d)/EEC(t)/
ACCESSION NR: AP5015349

FG-4/Pl-4/Pn-4/Pt-7 WS-4
UR/0286/65/000/009/0095/0095
681:142

AUTHOR: Lenov, N. N.; Davydovskiy, A. K.; Korolev, N. A.;
Nifontov, Yu. V.

52
B

TITLE: Device for communicating with controlled objects. Class 42,
No. 170766

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 95

TOPIC TAGS: digital computer, ¹⁶ component interrogation element, com-
mand element, storage matrix, matrix

ABSTRACT: The proposed device is intended for transmission of command and interrogation signals by digital control computers. The memory-cell matrix design includes a double system of buses for selecting two (switching and interrogation) storage cores of any cell through direct and inverse addresses. The switching core is coupled through a shaper to the controlled object. The shaper is in turn connected to a release circuit servicing the entire matrix. The interrogation core is con-

Card 1/2

L 57809-65

ACCESSION NR: AP5015349

UR/0286/65/000/009/0095/0095

nected to the remaining two cores of the cell, which store information on the condition of the objects. The output windings of the latter cores are connected to two reading amplifiers common to the matrix.

[DW]

ASSOCIATION: none

SUBMITTED: 13Sep63

ENCL: 00

SUB CODE: DREC

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4036

Card 2/2

L 2198C-66 EWP(k)/EWT(d)/EWP(h)/T/EWP(l)/EWP(v) IJP(c) GG/BB

ACC NR: AP6007865

SOURCE CODE: UR/0103/66/000/002/0082/0092

AUTHOR: Davydovskiy, A. K. (Moscow); Korolev, N. A. (Moscow); Lenov, N. N. (Moscow);
Nifontov, Yu. V. (Moscow)

ORG: none

16/1
TITLE: A coupler from a digital computer to controlled plants

SOURCE: Avtomatika i telemekhanika, no. 2, 1966, 82-92 50
8

TOPIC TAGS: digital computer, computer control system, control system equipment,
coupling circuit

16/1 14
ABSTRACT: The main function of a coupler of a control computer is to distribute and issue the control commands of the "switch" type ("switch on," "switch off") to controlled plants according to the address selected by the control computer. The coupler must also receive information on the state of each controlled plant (switched on or off). The present article describes a coupler for which the present authors obtained a patent (Ustroystvo svyazi s upravlyayemyimi ob'yektami. Avtorskoye svidetel'stvo No. 170766 s prioritatom ot 13.IX.1963. Byull. izobret., no. 9, 1965). The coupler assures reliability in the control of the plant by means of the control computer, prevents the possibility of issuing

Card 1/2

UDC: 681.142.35

L 21980-66

ACC NR: AP6007865

erroneous control signals to the plants due to malfunctions and defects in the coupler or in the computer itself. The coupler does not relay its command immediately, but stores the information in a corresponding cell of its matrix. A second command to the coupler, which is given according to another (inverse) address of its matrix, produces a command to the plant only if both commands were correct. The diagrams and characteristics of some of the versions of the coupler are presented. Orig. art. has: 7 figures and 1 table.

SUB CODE: 09, 13 / SUBM DATE: 22Jun66 / ORIG REF: 001

Card 2/2

nst

KOROLEV, N. F.

KOROLEV, N. F. — "Significance of the Dimensions and Topography of the Fatty Deposits in the Development of Winter-Resistant Pond Carp." Min Higher Education USSR, Leningrad Veterinary Inst, Vitebsk, 1955 *(Dissertation for the Degree of Candidate in Sciences)

SO: Knizhnaya letopis'. No. 37, 3 September 1955

*For the Degree of Candidate in Biological Sciences

KOROLEV, N. G., Candidate Tech Sci (diss) -- "Investigation of a tractor plow under conditions of the Dagestan ASSR". Saratov, 1959. 19 pp (Min Agric USSR, Saratov Agric Inst), 150 copies (KL, No 24, 1959, 137)

KOROLEV, N.G.

Biology and fishery of the Kamchatka crab *Paralichodes camtschatica* (Tilesius) in the southeastern part of the Bering Sea. Trudy VNIRO 49:99-105 '64. (MIRA 18:5)

1. Ekzoticheskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva i okeanografii.

KOROLEV, N. I.

Senior Veterinary Surgeon of the Administration of the Meat and Milk Industry of the Penza Council of National Economy.

"Method for the utilization of biogenic stimulants on fattening farms of the Penza Oblast", Veterinariya, Vol. 37, No. 12, p. 16, 1960.

KOROLEV, N.I.

Korolev, N.I. "Devices for solving algebraic equations of one unknown," Nauch. zapiski
Khar'k mekhan - mashinostroit. in-ta, Vol. IX, Issue 1, 1948, p. 35-46

SO: U-3566, 15 March, 53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

S/112/59/000/013/001/067
A002/A001

16.3001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 13, p. 4,
26179

AUTHOR: Korolev, N. I.

TITLE: The Distribution of Roots of an Algebraic Equation on a Complex
Plane and a Mechanism for Solving Algebraic Equations of Higher
Degrees With Real and Complex Coefficients

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1958, Vol. 14, pp. 213-221

TEXT: The theory of a mechanism for obtaining solutions is discussed.
Schematic diagrams illustrating the design of the mechanism are given. There are
5 references.

Translator's note: This is the full translation of the original Russian
abstract.

Card 1/1

KRYLOV, V.I.; KOROLEV, N.I.; SKOBYLA, N.S.

Remark on the computation of the integral $\int_0^{\infty} x^s e^{-x} f(x) dx$. Dokl. AN
BSSR 3 no.1:3-7 Ja '59. (MIRA 12:3)
(Integrals)

KOROLEV, N.I., starshiy veterinarnyy vrach

Use of biogenic stimulants on the fattening farms of Penza Province.
Veterinariia 37 no.12:16-17 D '60. (MIRA 15:4)

1. Upravleniye myasnoy i molochnoy promyshlennosti Pensenskogo
sovnarkhoza.
(Penza Province—Stock and stockbreeding) (Tissue extracts)

PANOV, N.I., prof.; TRET'YAKOV, A.P., dotsent; KOROLEV, N.I., inzh.

Selecting the efficient parameters and designs for the oil
cooling radiators of diesel locomotive diesel engines. Trudy
MIIT no.169:4-15 '63. (MLRA 17:6)

KOROLEV, N. I.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 552 - I

BOOK

Call No.: AF501905

Author: KOROLEV, N. I.

Full Title: TECHNIQUES OF CAST-IRON PRODUCTION

Transliterated Title: Tekhnologiya chugunoliteynogo proizvodstva

PUBLISHING DATA

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of
Machine-Building Literature (Mashgiz)

Date: 1951

No. pp.: 220

No. of copies: 6,000

Editorial Staff

Editor: Rabinovich, B. V., Kand. of Tech. Sci.

Appraiser: Konstantinov, L. S., Kand. of Tech. Sci.

PURPOSE: The book is intended as a textbook in courses for the improvement of the industrial and technical qualifications of foremen and workers in cast-iron foundries.

TEXT DATA

Coverage: This book describes in detail the processes of the manufacture of iron castings. The introduction contains a brief history of the development of foundry practice in Russia. Casting materials, their properties and preparation, furnace-charging materials, mechanical and chemical properties of cast iron, high-grade cast iron,

1. KOROLEV, N. I.; SVETLOV, S. I.; GOLOVKIN, A. M.; KOVALENKO, A. F.
2. USSR 600
4. Rolling Mills
7. Building foundations for rolling mills, Stroi. prom., 31, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KOROLEV, N.I.

SHAPRANOVSKIY, Sergey Aleksandrovich, inzhener; PEREVERZEV, Nikolay Zakharovich, inzhener; KOROLEV, Nikolay Ivanovich, inzhener; VOLODIN, A.I., kandidat tekhnicheskikh nauk, redaktor; YEGUHOV, P.M., inzhener, redaktor; VERINA, G.P., tekhnicheskij redaktor.

[Diesel locomotives; design, calculations and repairs] Teplovoy; konstruktsiya, raschety i remont. Izd. 2-e, perer. Moskva. Gos. transportnoe shel-dor. izd-vo, 1955. 555 p. (MLRA 8:8)
(Diesel locomotives)

KOROLEV, Nikolay Ivanovich; SIRYY, Yu.Yu., red.; YAROVA, L.V., red.
izd-va; LAVRENOVA, N.B., tekhn.red.

[Manual on the regulation of steam distribution in marine
engines] Posobie po regulirovaniu paroraspredelenia sudo-
vykh mashin. Moskva, Izd-vo "Morskoi transport," 1960. 106 p.
(MIRA 13:5)

(Marine engines)

AKOL'ZIN, P.A., doktor tekhn.nauk; KOROLEV, N.I., inzh.; LAZAREVA, K.I.,
inzh.; ZAYTSEVA, Z.I., inzh.; POLOVINKINA, T.A., tekhnik

Use of film-forming amines for preventing corrosion in condenser
systems. Teploenergetika 8 no.3:49-52 May '61. (MIRA 14:9)

1. Vsesoyuznyy teplotekhnicheskiy institut - Leningrad.
(Condensers (Steam))—Corrosion

PANOV, N.I., prof.; TRET'YAKOV, A.P., dotsent; KOROLEV, N.I., inzh.

Investigating the heat transfer of single flat ribbed pipes
depending on the parameters of ribbing. Trudy MIIT no.151:
29-41 '62. (MIRA 16:4)
(Heat—Transmission) (Diesel locomotives—Cooling)

PANOV, N.I., prof.; TRET'YAKOV, A.P., dotsent; KOROLEV, N.I., inzh.

Heat transfer through ribbed pipes. Trudy MIIT no.151:42-60
'62. (MIRA 16:2)
(Heat—Transmission) (Diesel locomotives—Cooling)

PANOV, N.I., prof.; TRET'YAKOV, A.P., dotsent; KRAVETS, Z.I., kand.
'tekhn.nauk; KOROLEV, N.I., inzh.

Studying the cooling system of the TGM diesel locomotive. Trudy
FIIT no.151:65-74 '62. (MIRA 16:2)
(Diesel locomotives--Cooling)

L 19351-63 EPR/EPF(c)/EMP(k)/EAT(l)/EPF(n)-2/EMP(q)/EAT(m)/BDS AFFTC/
ASD/IJP(C)/SSD Ps-L/Pr-L/Pf-L/Pu-L WN/JD/HW

ACCESSION NR: AR3C05022 S/0273/63/000/006/0015/0015

SOURCE: RZh. Dvigateli vnutrennego sgoraniya, Abs. 6.39.113

AUTHOR: Pancov, N. I.; Tret'yakov, A. P.; Korolev, N. I.

TITLE: Heat transfer through ribbed pipes 4

CITED SOURCE: Tr. Mosk. in-ta inzh. zh.-d. transp., vy*p. 151, 1962, 42-60

TOPIC TAGS: heat transfer, heat exchanger

TRANSLATION: The authors describe a method of thermal computation of flat heat exchanger pipes with ribs of constant rectangular cross-section. The method is in good agreement with experimental data.

DATE ACQ: 01Jul63

SUB CODE: MD

ENCL: 00

Card 1/1

KONOVALOV, Ye.G.; KOROLEV, N.I.

Theoretical study of the shape of a full-contact roller for
the rotary machining of shafts. Dokl. AN BSSR 7 no.6:370-372
Je '63. (MIRA 16:10)

1. Fiziko-tehnicheskiy institut AN BSSR. Predstavleno
akademikom AN BSSR.

KOROLEV, N.I.

Elastic equilibrium of a circular ring under the action of concentrated forces applied to one of the contours. Dokl. AN BSSR 7 no.10:657-660 0 '63. (MIRA 16:11)

1. Fiziko-tehnicheskii institut AN BSSR. Predstavleno akademikom AN BSSR N.S. Akulovym.

KOROLEV, Nikolay Ivanovich; YAMBUHENKO, V.S., red.

[Use of fuels and lubricants on merchant ships] Ispol'zovanie topliv i masel na morskikh sudakh. Moskva, Transport, 1964. 106 p. (MIRA 17:12)

KOROLEV, N.I.

Elastic equilibrium of a circular ring under the action of
two concentrated forces. Vestsi AN BSSR Ser. fiz. tekhn.
nav. no. 1:23-34 '64 (MIRA 17:7)

KOROLEV, Nikolay Ivanovich; SERGEYEV, D.I., red.

[Adjustment of marine diesel engines] Regulirovaniye
sudovykh dizelei. Izd.2., perer. i dop. Moskva,
Transport, 1965. 132 p. (MIRA 18:2)

SHAFRANOVSKIY, Sergey Aleksandrovich; PEREVERZEV, Nikolay Zakharovich;
; KOROLEV, Nikolay Ivanovich [deceased]; KUZ'MICH, Vadim
Dmitriyevich; KISELEVA, N.P., kand. tekhn. nauk, red.

[Diesel locomotives] Teplovozy. Izd.3., dop. i perer. [By]
S.A.Shafranovskii i dr. Moskva, Transport, 1964. 334 p.
(MIRA 18:2)

KOROLEV, M. M.

Chto chitat' o napravny h sooruzheniakh na lesosplave (What to read on floating installations in rafting). Moskva, Goslosbumizdat, 1952, 40 p.

SO: Monthly List of Russian Accessions, Vol 6, No. 3, June 1953

BARBANEL', Simon Rafailovich; BARBANEL', Solomon Rafailovich; KOROLEV,
Nikolay Mikhaylovich; SOLOMONIK, Aron Vul'fovich; TSIVKIN, Mikhail
Vul'fovich; PROVOROV, S.M., kand.tekhn.nauk., red.; BYSIMONT, L.O.,
red.; MALEK, Z.N., tekhn.red.

[Motion-picture projection] Kinoproektsionnaya tekhnika. Pod
obshchey red. S.M.Provorova. Moskva, Gos.izd-vo "Iskusstvo,"
1958. 517 p. (MIRA 12:3)

(Motion-picture projection)

K. E. Lev 4/4

AUTHOR: Korolev, K. K.

SOV-19-58-2-350/551

TITLE: A Method for Testing Models of Arched Dams (Sposob ispytaniya modeley arochnykh plotin)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 2, p 81 (USSR)

ABSTRACT: Class 42k, 28. Nr 111021 (573319 of 22 May 1957). Submitted to the Committee of Inventions and Discoveries at the Council of Ministers of USSR. A testing method for models of arched dams, utilizing tension-meters for loads and stresses, loading the model by applying tension to bands placed in several spots at different heights on the pressure side, and using resilient, e.g. rubber, pads to reduce the friction between the bands and the model.

1. Dams--Test methods
2. Dam models--Applications
3. Dam models--Testing equipment

Card 1/1

KOROLEV, N. M.

2a. USSR

2b. Novosibirsk

3. Deputy Chief Engineer, Sibmetallstroy
Kombinat, 1946

9. Soviet Source: N. Pravda, 5 January 1946,
Moscow
Abstracted in USAF "Treasure Island" Report No.
43461, on file in Library of Congress, Air
Information Division.

S/019/60/000/018/091/170
A152/A029

AUTHORS: Afanas'yeva, G. M., Marushkina, T. A., Korolev, N. M., Kondrashov.
V. I., Struyanskiy, L. I.

TITLE: A Semi-Automatic Hydraulic Test Stand for Hollow Articles

PERIODICAL: Byulleten' izobreteniy, 1960, No. 18, 1-47

TEXT: Class 42k, 23. No. 131935 (652099/25 of January 26, 1960). This stand includes two electrically-driven pumps: one for filling articles with pressure fluid, the other for operating the charging device. The stand has the following special feature: in order to achieve automatic testing, it is fitted with two hydraulic systems, one of which fills articles with pressure fluid and engages (through a relay) the pressure of the other system that feeds pressure into the larger chamber of a piston multiplier, producing an assigned pressure within the article being tested, the smaller chamber of which is connected by a time relay (which removes the load after a prescribed period of time) with the drain.

Card 1/1

SHKLYAR, F. R.; TIMOFEYEV, V. N.; Primali uchastiye: PAKHALUYEV,
K. M., inzh.; KOROLEV, N. M., inzh.; CHEREMNYKH, V. I.,
laborant; GERASIMOV, G. I., laborant; ROMANTSEVA, E. P.,
laborant; RUZHENTSEVA, T. M., laborant

Experimental investigation of the regenerative heat exchange
process. Sbor. nauch. trud. VNIIMT no.8:119-136 '62.
(MIRA 16:1)

(Air preheaters—Testing)
(Heat—Transmission)

PAKHALUYEV, K.M.; KOROLEV, N.M.; ZHURKIN, V.S.; SOBOLEV, A.A.

Experience in the operation of a holding furnace with uncooled
hearth supports. Stal' 22 no.12:1135-1136 D '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy
teplotekhniki i zavod "Krasnyy Oktiabr'."
(Furnaces, Heating)

KOROLEV, N.M., inzh.; RYAKHOVSKAYA, A.P., inzh.

Structure and properties of welded joints in OKh13 (E1496) steel.
Svar. proizv. no.10:20-22 0 '63. (MIRA 16:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut
neftyanogo mashinostroyeniya.

KOROLEV, N.M., inzh.

Welding dissimilar steels. Svar. proizv. no.11:8-10 N'63.
(MIRA 17:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut neftyanogo mashinostroyeniya.

L 23030-65 EWT(m)/EWA(d)/EWP(t)/EWP(b) KJW/JD/WB

ACCESSION NR: AR4048230

S/0137/64/000/009/E009/E009

SOURCE: Ref. zh. Metallurgiya, Abs. 9E54

AUTHOR: Korolev, N. M.

TITLE: Corrosion resistance of bimetallic welded joints with an alloyed layer of steel OKh13 (EI496)

CITED SOURCE: Sb. Konstrukts. materialy* dlya neft. prom-sti. Vy*p. 2. M., Nedra, 1964, 23-28

TOPIC TAGS: metal corrosion, steel, intercrystalline corrosion, niobium, welding/ steel OKh13 (EI496), welding electrode TsL-9, welding electrode ZIO-8

TRANSLATION: Giproneftmash has investigated the corrosion resistance of steel OKh13 (EI496), the zones of heat effect, and the austenitic metal seam of a coating which has a composition of type 18-8 (18% Cr, 8% Ni). As a result, the following conclusions were drawn: (1) Under certain heating conditions, steel OKh13 has a tendency toward intercrystalline corrosion, but prolonged heating at working

Card 1/3

L 23030-65

ACCESSION NR: AR4048230

temperatures eliminate this tendency toward intercrystalline corrosion. (2) Tempering, as well as prolonged heatings at working temperatures, has a favorable effect on the corrosion resistance of the heat effect zone of steel OKh13. (3) The metal of the seams, made with Tsl-9 electrodes stabilized with Nb, does not have a tendency toward intercrystalline corrosion in its state after welding, stabilizing annealing, and inducing heating at 650°. Seams made with Z10-8 electrodes, which were stable in their initial state, do not retain this resistance to intercrystalline corrosion after heating at 650° for 2 hrs. Prolonged heatings at the stated temperatures bring about a tendency toward intercrystalline corrosion of the metal in seams of both types. However, the degree of intercrystalline corrosion is different. The metal of a seam, alloyed with Nb, after maintaining at 1,000 hrs at 400°, is stable against intercrystalline corrosion, but metal not stabilized with Nb exhibits a tendency toward intercrystalline corrosion. (5) The metal of seams stabilized with Nb, under conditions of a 3 hr annealing at 870° previous to prolonged heatings, does not show a tendency toward intercrystalline corrosion. Thus the use of electrodes containing Nb for welding pieces at temperatures less than 400° without special heat treatment

Card 2/3

L 23030-65

ACCESSION NR: AR4048230

does not yield satisfactory results. 4 tables.

SUB CODE: MM

ENCL: 00

Card 3/3

L 14135-65 EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b) Pf-4 ASD(m)-3/
AFETR MJW/JD/HM

ACCESSION NR: AR4048231

S/0137/64/000/009/E009/E009

SOURCE: Ref. zh. Metallurgiya, Abs. 9B56

AUTHOR: Korolev, N. M.; Ryakhovskaya, A. P. 13

TITLE: Structure and properties of the zone around welded joints in
OKh13 (EI496) steel 18

CITED SOURCE: Sb. Konstrukts. materialy* dlya nef. prom-sti. Vy*p.
2. M., Nedra, 1964, 29-35

TOPIC TAGS: welded joint, arc welding, welding technology, steel,
austenitic electrode/ steel OKh13

TRANSLATION: The special characteristics of arc welding with
austenitic electrodes of OKh13 (EI496) steel with a thickness of 5-10
mm have been considered. The microstructure and properties of the
zone in the neighborhood of the joint and the resistance of this zone
to the formation of hardening fractures in OKh13 steel were studied.
As a result, the following conclusions were drawn: 1. OKh13 steel
in thicknesses up to 10 mm can be welded with austenitic electrodes

Card 1/2

L 16135-65

ACCESSION NR: AR4048231

without previous preheating. 2. Welded joints of OKh13 steel after welding have a low a_k around the boundaries of the fusion zone. The main factor tending to lower a_k is the marked structural nonhomogeneity in the zone around the seam. Annealing at a temperature on the order of 700° increases resistance to impact stress by reducing the degree of structural nonhomogeneity. 7 figures. 2 tables.

SUB CODE: MM

ENCL: 00

Card 2/2

L 16134-65 ENT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b) Pf-4 ASD(m)-3
ACCESSION NR: AR4048233 JD/HW/MB S/0137/64/000/009/E010/E010

SOURCE: Ref. zh. Metallurgiya, Abs. 9E58

AUTHOR: Korolev, N. M. B

TITLE: Corrosion resistance of welded joints of austenitic chromium
nickel steels 16

CITED SOURCE: Sb. Konstrukts. materialy* dlya neft. prom-sti. Vyp.
2. M., Nedra, 1964, 36-56

TOPIC TAGS: corrosion resistance, joint, weld joint, chromium
nickel steel, austenite steel, welding technology

TRANSLATION: Data on the welding of austenitic Cr-Ni steels are
correlated, and recommendations are proposed for choice of welding
materials. A summary of data on the resistance of welded seams to
intercrystalline corrosion is given. 26 literature titles.

SUB CODE: MM

¹⁶ ENCL: 00

Card 1/1

L 17930-65 EWT(m)/EWP(w)/EWA(d)/ENP(v)/ENP(t)/ENP(k)/ENP(b) Pf-L/Pad LJP(c)/
AFMDC/ASD(m)-3/ASD(f)-2/AFETR/AFTC(p) MJW/JD/HM/HN
ACCESSION No.: AR404-232 S/0137/64/000/009/E009/E010

SOURCE: Ref. zh. Metallurgiya, Abs. 9E57

AUTHOR: Nikiforov, V. A.; Kerolev, N. M.; Korneyev, B. F.; Ryakhovskaya, A. P. B

TITLE: Mechanical properties and weldability of economically
alloyed nickel stainless steel type OKh21N5T (EP-53)

CITED SOURCE: Sb. Konstrukts. materialy dlya neft. prom-sti. Vyyp.
2. M., Nedra, 1964, 57-67

TOPIC TAGS: nickel steel, stainless steel, nickel stainless steel,
weldability, mechanical property, corrosion resistance, welding/
steel OKh21N5T (EP-53), steel Kh8N10T

TRANSLATION: TsNIICHERMET has proposed economically alloyed nickel
steel (type OKh21N5T (EP-53)) as a substitute for Kh8N10T steel.
Giproneftemash has investigated the properties of this steel and its
weldability, as well as joints of this steel with low carbon steels
of the steel 3 type. The following conclusions were drawn. OKh21N5T

Card 1/2

L 17930-65

ACCESSION NR: AR404232

(EP-53) steel should be used for fabrication of equipment designed to operate at temperatures up to 300°. OKh21N5T steels are stable against intercrystalline corrosion in their delivered condition, after reheating at 350-900°, and also after the thermal cycle of welding. This steel has satisfactory weldability but shows a tendency toward growth in grain size in the zone around the joint. Manual arc welding of OKh21N5T steel can be done with austenitic-ferrite electrodes (types GL-2, TsT-15); automatic welding can be done with types Sv-04Kh19N9, Sv-06Kh19N9T, and Sv-07Kh25N13 with an AN-26 flux. Welding of OKh21N5T with carbon steels should be done with electrodes of Type EA2 (brand ZIO-8).

E 3 CODE: MM

ENCL: 00

c 2/2

L 1058-66 EWT(m)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c)

IJP(c) MJW/JD/HM/HW

ACCESSION NR: AP5022350

UR/0135/65/000/009/0021/0024

621.791.052.011:669.15-194

AUTHOR: Korolev, N. M. (Engineer); Ryakhovskaya, A. P. (Engineer)

TITLE: Properties of the welded joints of stainless steels OKh21N5T and OKh21N6M2T at low temperatures

SOURCE: Svarochnoye proizvodstvo, no. 9, 1965, 21-24

TOPIC TAGS: metal joining, stainless steel, weldability, carbon steel, arc welding, impact strength, ferrite

ABSTRACT: These two newly developed Soviet ferrite-austenite stainless steels have a below-average Ni content (5.5 and 6.2%). In connection with the research into the weldability of these steels with one another and with carbon steel, the article presents some data on the impact strength of the welded joints of these steels and of the base metal in the presence of negative temperatures reaching -40°C at which welding is still possible (e.g. under the climatic conditions of the Eastern USSR). Specimens of both steels, 6 and 18 mm thick, were subjected to submerged arc welding by manual and automatic techniques and tested for impact

Cord 1/3

L 1058-66

ACCESSION NR: AP5022350

ASSOCIATION: Giproneftemash (State Institute of Petroleum Machinery)

SUBMITTED: 00

ENCL: 00

SUB CODE: KM, IE

NO REF SOV: 005

OTHER: 000

Card 3/3

DP

L 22853-66 EWT(R)/EWA(d)/EWP(v)/T/EWP(l)/EWP(R) JD/IE

ACC NR: AP6006101

(N)

SOURCE CODE: UR/0135/66/000/002/0019/0021

AUTHOR: Korolev, N. M. (Engineer)

ORG: Giproneftemash

TITLE: Welding of St. 3 steel to Kh18N10T steel with UONI-13/45 electrodes

SOURCE: Svarochnoye proizvodstvo, no. 2, 1966, 19-21

TOPIC TAGS: arc welding, alloy steel, welding electrode, welding equipment, metallographic examination

ABSTRACT: The steel plates (12 mm thick) were welded with electrodes 4 mm in diameter. The chemical compositions of the weld surface and the core are given: for the surface of the seam--0.075% (wt) C, 1.57% Cr, 0.87% Ni, 0.29% Si and 0.58% Mn; for the core--0.09% C, 3.0% Cr, 1.75% Ni, 0.24% Si and 0.63% Mn. Fracture strength, bend angle, ductility and impact resistance are listed. Microstructure and microhardness distributions are shown for the surface layer and for the seam core. The fracture occurred away from the weld and the elongation had an average value of

Card 1/2

UDC: 621.791.75:669.15-194

L 22653-66

ACC NR: AP6006181

13.3%. The bend angle averaged 70° with a minimum of 45°. Mixtures of sorbite and martensite were discernible in the core while at the surface of the weld, layered pearlite and ferrite were found. Microhardness traverses are shown along and across the weld; these show a greater degree of austenite decomposition in the core as a result of the higher alloy content. Tests were also made on St. 3 and Kh18N10T joints formed by austenitic electrodes of the EA-2 and EA-1 type. The same mechanical properties were listed and compared. The EA-2 (EI0-8) electrode had a lower carbon content (.0.69%) and higher alloy content (Cr--20.0%, Ni--11.1%, Si--0.62% and Mn--1.95%) than the EA-1 (ENTU-3). The best ductility was obtained for EA-2 because of its higher austenite content and its use in welding St. 3 and Kh18N10T was recommended over the other electrodes. Orig. art. has: 2 figures, 4 tables.

SUB CODE: 13,11/

SUBM DATE: 00/

ORIG REF: 003/

OTH REF: 000

Joining of dissimilar metals

18

Card 2/2

Subject : USSR/Aeronautics - landing approach AID P - 4750
Card 1/1 Pub. 135 - 8/31
Author : Korolev, N. N., Maj.
Title : Landing approach with the aid of radar station
Periodical : Vest. vozd. flota, 8, 36-38, Ag 1956
Abstract : This is the second in the series of 4 articles which appear in this issue under the title "Landing Approach under Adverse Weather Conditions". In this article a method of landing approach with the aid of radar station, in case the automatic radio compass fails, is described in detail. Two diagrams. The article merits attention.
Institution : None
Submitted : No date

KOROLEV, N.P., inzh.; LEBEDEV, V.Ye., inzh.

Welding objects made of the AMg5B alloy on the MTP-75 machine
with a voltage booster. Svar. proizv. no.4:36-37 Ap '65.
(MIRA 18:6)

VAKULIN, D.Ya., doktor biologicheskikh nauk; KOROLEV, N.P.

"Medicinal plants, raw materials, and preparations" by A.N. Obukhov.
Reviewed by D.Ia. Vakulin, N.P. Korolev. Apt. delo 10 no. 2:88-89
Mr-Apr '61. (MIRA 14:4)

1. Zaveduyushchiy nauchnyy bibliotekoy Instituta imeni akademika
Filatova (for Korolev).

(BOTANY, MEDICAL) (OBUKHOV, A.N.)

ADKOLLO, N. P.

(4)
Radiomimetic Effect of the Oxidation Products of Unsaturated Fatty
Acids in Various Biological Systems and Objects

Yu. B. Kudryashov, G. I. Gerasimov, E. N. Goncharenko,
N. P. Korolev, N. G. Labzina, B. A. Lomovskiy,
Lyu Khao-tu, Syue Yul-khus and O. F. Filenko

Oxidation products of oleic acid acted *in vitro* on enzyme systems responsible for the decomposition of proteins in tissues. They inhibited the autolysis reaction. Unoxidized or weakly oxidized fatty acid increased autolysis. Ionizing radiation influences autolysis, depending on the method of irradiation, dose, and time after irradiation. It was shown that the disturbance of the autolytic decomposition of proteins in irradiated animals occurs as an indirect mechanism apparently due to toxic substances of the type of oxidized oleic acid. Peroxides of unsaturated fatty acids have some haemolytic properties. Radio-protective compounds, i.e. 2-mercaptoethanol, amino-

ethylthiuronine, cysteine and others also reduce the haemolytic properties of the oxidation products of oleic acid. The effect of oxidation products of oleic acid on haploid and diploid yeast cells is similar to that of X-rays as judged by cell survival, formation of micro- and macro-colonies, and their form. Anoxia reduces the sensitivity of haploid cells to oxidized oleic acid. The oxygen effect is smaller than that for ionizing radiation. This suggests that the primary mechanism of radiation injury involves at least two consecutive oxidation reactions. Similar results were found in mice, rats and rabbits. The following parameters were investigated: survival, blood picture, physico-chemical properties of erythrocytes, time of coagulation and the thromboplastic activity of blood, activity of liver cathepsins, permeability of histo-haematic barriers (liver, brain, skeletal muscles), appearance of micro-necroses in bone marrow. The results suggest that oxidation products of unsaturated fatty acids, the peroxides, aldehydes and ketones (perhaps also radicals of these products) are radiomimetic. Since the substances examined may appear in organs and tissues of irradiated animals, they are particularly interesting in comparison with known radiomimetics.

Moscow State University, USSR

Report presented at the 2nd Intl. Congress of Radiation Research,
Harrogate/Yorkshire, Gt. Brit. 5-11 Aug 1962

KOROLEV, N. P.
AID Nr. 974-9 22 May

**PROTECTION AGAINST RADIOMIMETIC EFFECT OF OLEIC ACID OXIDATION
PRODUCTS BY ANTIRADIATION DRUGS (USSR)**

Kakushkina, M. L., ~~N. P. Koroley~~, and Yu. B. Kudryashov. IN: Akademiya
nauk SSSR. Doklady, v. 149, no. 4, 1 Apr 1963, 973-975.

S/020/63/149/004/024/025

The effect of cysteamine, cysteine, cystineamine, and AET on radiomimetic hemolysis, induced in γ -irradiated (100 to 1000 kr) erythrocytes by incubation with various concentrations of oxidized oleic acid, was experimentally investigated. Post-incubation erythrograms showed an increase in the number of erythrocytes and a decrease in their stability. These effects are similar to those produced by ionizing radiation damage. The addition of cysteamine eliminates these changes almost completely in the case of ionizing radiation injury. The erythrograms of erythrocytes incubated with oxidized oleic acid in the presence of cysteamine showed the latter to have a protective effect in this case as well. AET afforded the greatest protection against both radiation and

Card 1/2

REF ID: A74-9 22 May

PROTECTION AGAINST RADIOMIMETIC EFFECT [Cont'd]

S/020/63/149/004/024/025

radiomimetic effects, while α -amine gave no protection in either case. Cystineamine gave unequal protection against radiation and radiomimetic effects. The data indicate that the oxidation products of unsaturated fatty acids participate in the primary radiation reactions of biological objects. Erythrograms of the effects of radiomimetic agents are useful for rapid preliminary evaluation and selection of antiradiation agents.

[AB]

Card 2/2

L 12948-65 EWG(j)/EWT(m)
ACCESSION NR: AP4043211

S/0205/64/004/004/0482/0486

AUTHOR: Korolev, N. P.

TITLE: Oxygen effect during irradiation of human erythrocytes by gamma rays and the effect of oleic acid on them ^{B 19}

SOURCE: Radiobiologiya, v. 4, no. 4, 1964, 482-486

TOPIC TAGS: oxygen effect, irradiation, oleic acid, erythrocyte, radiobiology

ABSTRACT: Experiments have been performed to study the influence of oxidized and nonoxidized oleic acid on the oxygen effect during irradiation of human erythrocytes by gamma rays. Erythrocytes extracted by centrifugation in physiological saline were exposed to doses of 1800 r/min. The oxygen effect appeared when irradiation took place in the presence of oxidized oleic acid, but it was absent when nonoxidized oleic acid was used. The appearance of the oxygen effect is explained by a catalytic interaction between hemoglobin and peroxides of the fatty acids of the erythrocytes, which break down in the presence of oxygen, and by a disruption of the osmotic balance between the erythrocytes and the medium. Orig. art. has: 1 figure and 2 graphs.
Card 1/2

L 12948-65

ACCESSION NR: AP4043211

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomono-
sova, Biologo-Pochvennyy fakultet (Moscow State University, Depart-
ment of Biology and Soil Sciences)

SUBMITTED: 12 Feb63

ATD PRESS: 3098

ENCL: 00

SUB CODE: LS

NO REF SOV: 009

OTHER: 013

Card 2/2

KOROLEV, N.S.

ZHELTOV, G.A. (Dneprodzerzhinsk); KISEL', N.D., inzh. (Khar'kov);
KOROLEV, N.S. (Barnaul)

Discussion of the article "The engineer's bill to the physician."
Lacking interest and inspiration. G.A.Sheltov. Public duty. N.D.
Kisel'. "Not our business." N.S.Korolev. Zdorov'e 4 no.1:4 Ja '58.
(HEALTH EDUCATION) (MIRA 11:2)

KOROLEV, N.S., inzh.

Mechanization and automatization of welding at the "Ryazsel'mach"
Plant. Svar. proizv. no.10:31-32 0 '61. (MIRA 14:9)
(Electric welding--Equipment and supplies)

DAVIDYANTS, Vladimir Timofeyevich; KOROLEV, N.S., otvetstvennyy redaktor;
KOROVENKOVA, Z.A., tekhnicheskiiy redaktor

[Roof control by means of complete cave in] Upravlenie krovlei
polnym obrusheniem. Moskva, Ugletekhnizdat, 1957. 181 p.
(Coal mines and mining) (MIRA 10:9)

KUTOVOY, I.D.; DEPARMA, V.N.; LIVSHITS, L.G.; KOROLEV, N.V.; DEMIN, V.S.,
inzhener, redaktor; OGLOBLIN, K.S.; redaktor; KAYKORODA, M., tekhnicheskii redaktor.

[Repair equipment for machine-tractor stations. Apparatus, devices and tools shown at the All-Union Agricultural Exhibit; a reference manual] Remontnoe obozneniye masterskoi MTB. Pribory, prispesoblennia i instrumenty, ekspozitsionnye na VSKhV; spravechnik. Moskva, Gos.izd-vo kul'turno-prosvetitel'noi lit-ry, 1955. 175 p. (MIRA 9:6)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954- .
(Agricultural machinery--Repairing)

KOROLEV, N.V., inzh.; GRACHEVA, L.O., kand.tekhn.nauk; MORGAYEV, V.N., inzh.
(g.Pushkino)

Necessity for new methods in the inspection and evaluation of
track conditions. Zhel.-dor.transp. 41 no.9:60-62 S '59.
(MIRA 13:2)

(Railroads--Track)

KOROLEV, N.V., inzh.

Scientific research done by the Chinese railroads. Vest.
TSNII MPS 19 no.4:57-58 '60. (MIRA 13:7)
(China—Railroads)

KOROLEV, N.V., inzh.; BORODAY, S.M., kand.tekhn.nauk

Improving the methods of car maintenance and repair. Vest.
TSNII MPS 21 no.2:23-27 '62. (MIRA 15:4)
(Railroads—Cars—Maintenance and repair)

KOROLEV, N.V.; AGROSKIN, L.S.

Installation for determining the reflectivity of minerals. Geol.
rud. nestorosh. no. 4:137-140 J1-Ag '59. (MIRA 13:1)

1. Gosudarstvennyy opticheskiy institut, Leningrad.
(Reflectometer) (Mineralogy)

GENKIN, A.D.; KOROLEV, N.V.,

Method for determining small mineral grains in ores. Geol.rud.-
mestorozh. no.5:64-79 S-O '61. (MIRA 14:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralologii
i geokhimii AN SSSR, Moskva, i Gosudarstvennyy opticheskiy institut,
Leningrad.

(Mineralogy, Determinative)

25640

S/032/61/027/007/012/012
B110/B203

15-2670

AUTHORS: Korolev, N. V., and Molchanov, V. S.
TITLE: New interference apparatus for measuring the alkaliproofness
of glasses
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TEXT: To study the alkali corrosion of silicate glasses by the interference method, one part of the previously polished sample is protected by a rubber coat, the other one is exposed to the reagent. The height of the step formed at the boundary of the two parts, representing a measure for the alkaliproofness, is determined by measuring the interference band shift with the microinterferometers MMU-4 (MII-4), MMU-5 (MII-5), and I3K-46 (IZK-46), if the transition zone is ≤ 0.1 mm. Often, alkali penetrates below the rubber, or forms a wide "ditch" by "linear adsorption". Besides, the MII-4 apparatus gives only a slight contrast of the interference pattern due to the great difference in the reflection coefficients of glass and aluminum-coated mirror. These shortcomings are eliminated by the double-interference polarization microscope (Fig. 1) developed for polarization measurements of

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micrograins according to P. Drude (Ref. 6: Optika, ONTI (1935)). It is designed on the basis of V. P. Linnik's double microscope. The horizontal working slit 1 of the microscope is illuminated by an **CBA-120** (SVD-120) mercury vapor lamp 2 via collector 3, light filter 4, and polaroid polarizer 5. By means of collimator objective 6 and microobjective 7 ($f = 25.02$; $A = 0.13$), the slit is projected on the upper side of the sample 8 with the test glass 9, 0.6-0.8 mm thick, placed upon it. Between 6 and 7, there is the diaphragm 10, oriented perpendicularly to slit 1, for the incidence plane of the rays on the sample surface. 5 is adjusted so that the polarization plane of the emitted light forms an angle of 45° with the plane passing through the optical axis of the illuminating and observation microscopes. In the observation microscope, a few images of the slit may be seen after applying the test glass 9, due to light reflection from the sample surface and the surface of the test glass. For the interference measurement are also used: the rotating polaroid analyzer 11, the flap 12, and the sliding cylindrical lens 13. The image of the rear focal plane of microobjective 14 is projected on the network of the eyepiece micrometer 15 by means of rays lying in the drawing plane, the image of the sample surface is projected by means of rays lying in the perpendicular plane. In

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the illuminated rectangle visible in the eyepiece, the vertical coordinate corresponds to a certain angle of incidence on the surface, the horizontal coordinate to a certain surface point. 12 lies in the plane where the cylindrical lens forms the image of slit 1 with rays lying in the drawing plane. 12 is to remove the light reflection from the test glass surface. 13 is introduced after adjusting the slit images, projected on the upper side of the sample and on the lower side of the test glass, into the center of the visual field of the eyepiece micrometer. Interference bands are formed by the interference of light beams reflected from the lower side of the test glass and the sample surface. If the two surfaces are parallel, straight, horizontal lines are formed whose number depends on the surface clearance: $K = (2h/\lambda)(\cos\psi_{\min} - \cos\psi_{\max})$, where K = number of bands,

h = clearance between 8 and 9, λ = wavelength (with Hg lamp and TC-7 (PS-7) light filter: $\lambda = 0.546 \mu$), ψ_{\min} and ψ_{\max} = minimum and maximum angle of incidence on the sample surface. In the case of 7 with opening $A = 0.13$, $\psi_{\min} = 37^{\circ}30'$, $\psi_{\max} = 52^{\circ}30'$. In the transition zone, h changes, the interference bands bend, and their number in the illuminated rectangle

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changes. If the step has a smooth boundary, if the course of a band can be pursued, and if the integral and fractional number of bands in the curvature can be accurately measured, the following holds for the step height:
 $h = (\Delta K \cdot \lambda) / 1.41 = 0.38 \Delta K, (\mu)$. If the transition zone is not smooth, the total number of bands is measured in the rectangle on the left and right of the boundary. In this case, $h = 1.48 \cdot \Delta n, \mu$, where Δn = difference of the band numbers left and right of the boundary in the rectangle. Test glasses (87-X)% SiO_2 · X% $\text{RO} \cdot 13\% \text{Na}_2\text{O}$ as well as quartz test glasses were treated with

0.5 N NaOH at 90°C for 4 hr. The values obtained with the new apparatus and by N. Ye. Prikhod'ko with an MII-1 (MII-1) interference microscope are in good agreement. The advantage of the new apparatus is its applicability also with strongly blurred boundaries, as well as the more distinct contrast of its interference pattern. It is suited for determining steps of 0.02-10 μ as compared with 0.03-1 μ with MII-1. It is also used for measuring the thickness of films, formed by acid or salt solutions. There are 2 figures, 1 table, and 7 references: 5 Soviet-bloc and 2 non-Soviet-bloc. The two references to English-language publications read as follows: Ref. 1: J. Franklin Inst., 220, 498 (1935); Ref. 2: R. Pike, D. Hubbard. J. Research. Nat. Bur. Stand., 50, 87 (1953).
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KOROLEVA, N.V.; KOROLEV, N.V.

Appearance of the fine phases in alloys in an optical microscope.

Zav.lab. 29 no.4:460 '63.

(MIRA 16:5)

(Alloys—Metallography)

GALOYAN, A.A.; KOROLEV, N.V.

Use of emission microspectral analysis in studying the spots
on paper chromatograms. Dokl. AN Arm. SSR 37 no.4:217-220
'63. (MIRA 17:8)

1. Institut biokhimii AN ArmSSR. Predstavleno akademikom AN
ArmSSR G.Kh. Bunyatyanom.

EVREYNOVA, T.N.:KOROLEV, N.V.

Ultraviolet microscopy in the determination of nucleic acids in
coacervates. Doklady Akad. nauk SSSR 87 no. 1:105-108 1 Nov 1952.
(CLML 23:5)

1. Presented by Academician A. I. Oparin 13 September 1952.

BRUMBERG, Ye.M.; LARIONOV, L.F.; KONDRAT'YEVA, T.M.; KOROLEV, N.V.

Visual ultraviolet microscopy as a new method of study of live cell. Doklady Akad. nauk SSSR 88 no. 6:1055-1057 21 Feb 1953.

(CML 24:1)

1. Presented by Academician A. I. Abrikosov 6 January 1953. 2. Central Roentgenological, Radiological, and Cancer Institute.